

What is claimed is:

1. A paperboard useful in paper-based packages or containers for holding liquids or solids comprising a sub-surface layer of an adsorbent material to reduce inherent board odor with essentially no reduction in strength of the parent board.
2. The paperboard of claim 1 wherein the adsorbent is selected from the group consisting of activated carbon, zeolite, and cyclodextrins.
3. The paperboard of claim 2 wherein the adsorbent is an activated carbon selected from the group consisting of granular, powdered, pelletized, and fiberized activated carbons, and combinations thereof.
4. The paperboard of claim 2 wherein the adsorbent is present in the board at a concentration above 0.1 weight % of the board.
5. The paperboard of claim 1 wherein the adsorbent is applied to the board using an air atomized spray.
6. The paperboard of claim 1 wherein the adsorbent is applied to the board using equipment selected from the group consisting of a curtain coater, a size press, a blade coater, and a headbox.

7. The paperboard of claim 1 further comprised of a single layer of paperboard.

8. The paperboard of claim 1 further comprising multiple layers of paperboard including a topmost layer and a layer positioned immediately below the topmost layer.

9. The paperboard of claim 8 wherein the sub-surface layer of an adsorbent material is located in the layer positioned immediately below the topmost layer.

10. A method of preparing paperboard produced from pulp stock and useful in paper-based packages or containers for holding liquids or solids comprising adding an adsorbent material to the pulp stock to provide a sub-surface layer of said adsorbent material within the paperboard.

11. The method of claim 10 wherein the adsorbent addition to the paperboard adsorbs the undesired odors emitted from polymer- and pigment-based additives employed in the conversion of the paperboard into a packaging or a container product.

12. The method of claim 10 wherein the adsorbent is added in combination with an oxidant.

13. The method of claim 12 wherein the oxidant is hydrogen peroxide.

14. The method of claim 10 wherein the adsorbent is added in combination with an antioxidant.
15. The method of claim 10 wherein the paperboard is formed of a single layer of the pulp stock.
16. The method of claim 10 wherein the paperboard is formed of multiple layers of the pulp stock including a topmost layer and a layer positioned immediately below the topmost layer.
17. The method of claim 16 wherein the sub-surface layer of the adsorbent material is added to the pulp stock which forms the layer positioned immediately below the topmost layer.